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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,926

03/26/2004

Osamu Kawachi

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6762

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7590

09/19/2006

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EXAMINER

SUMMONS, BARBARA

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/809,926	Applicant(s) KAWACHI ET AL.	
	Examiner Barbara Summons	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006 (RCE with an amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 7-19 is/are allowed.
- 6) ☒ Claim(s) 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/30/06 has been entered.

Maintained Claim Objections

2. Claims 18 and 19 are objected to because of the following informalities:

In claim 18, on line 3, "and first film" should be changed to - - and a first film - -. Applicants did not make this change stating that claim 18 already reads "and a first film" (see page 11, lines 10-12 of the amendment), but this statement is in error. Could Applicants have been looking at claim 19?

In claim 19, on line 8, "a position" should be changed to - - and a position - - in order to provide a grammatically correct conclusion to the step (b).

Appropriate correction is required.

Withdrawn Claim Rejections - 35 USC § 102

3. Applicants' amendment and arguments received 6/30/06 have overcome the prior rejection based on Cohn et al., and the rejection has been withdrawn.

New Grounds of Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 20 and 21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Enshasy U.S. 2003/0080832 (of record).

Regarding the claimed feature “surface activation process”, as also stated in the prior Office action, it should be noted that the specification is not considered to have provided a special definition for this terminology, and so the Examiner will give it its broadest possible interpretation in this and any following rejections. Additionally, regarding apparatus claim 20, “joined by a surface activation process” is given very little patentable weight since this is considered to be a product-by-process claim in which it is the finished product that determines patentability. That is, “the patentability of a product does not depend on its method of production” *In re Thorpe*, USPQ 964,966 (Fed. Cir. 1985) (citations omitted). [See also MPEP § 2113].

Fig. 6 of Enshasy discloses a surface acoustic wave (SAW) device and an associated method of making the device, comprising: a piezoelectric substrate 12 having a first surface on which comb-electrodes formed in the active region 14 (see also

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Figs. 1-3 and section [0012]), first pads 16 that are inherently connected thereto (ibid.), and a first film 10 (Fig. 2) are provided, the first film 10 being provided along edges of the piezoelectric substrate so as to surround the comb-like electrodes; and a base substrate 22 having a second surface on which second pads 28 (Fig. 5) joined to the first pads 16 by bumps 20, and a second film 36 joined to the first film 10 are provided, the second film 36 being provided along edges of the base substrate 22; and wherein the first and second films 10 and 36 have applied thereto a "surface activation process" being heating which activates the surfaces of the first and second films by partially melting the gold solder layer 18 surface of the first film 10 (see Fig. 3 and section [0013]) and the solder layer 42 surface of the second film 36 so that the activated surfaces are joined to hermetically seal the SAW device in a cavity defined by the first and second films (see also sections [0014]-[0015]), and edges of the first and second films being flush with the side surfaces of the piezoelectric substrate 12 and the base substrate 22 so as to form parts of the side surfaces of the SAW device.

6. Claims 20 and 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kong et al. EP 0 609 062 (of record).

Fig. 6 of Kong et al. discloses a SAW device 31 comprising: a piezoelectric substrate 11 having a first surface on which comb-electrodes, first pads 23 (see Fig. 2) and a first film 17 are provided, the first film 17 being provided along edges of the piezoelectric substrate 11 so as to surround the comb-like electrodes; and a base substrate 15 having a second surface on which second pads (not labeled) joined to the

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first pads, and a second film 17 (Fig. 3) joined to the first film 10 are provided, the second film 17 being provided along edges of the base substrate 15; and wherein the first and second films 17 have applied thereto a "surface activation process" being heating which activates the surfaces of the first and second films by partially melting the gold solder layer 17/33 (Figs. 2/6) and the indium solder layer 17/35 (Figs. 3/6) so that the activated surfaces are joined to hermetically seal the SAW device in a cavity defined by the first and second films (see also sections [0014]-[0015]), and edges of the first and second films being flush with the side surfaces of the piezoelectric substrate 11 and the base substrate 15 so as to form parts of the side surfaces of the SAW device.

Allowable Subject Matter

7. Claims 1-5 and 7-19 are allowable over the prior art of record.

Response to Arguments

8. Applicant's arguments with respect to new claims 20 and 21 and concerning the most recently applied reference to Cohn et al., have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Summons whose telephone number is (571) 272-1771. The examiner can normally be reached on M-Th, M-Fr.

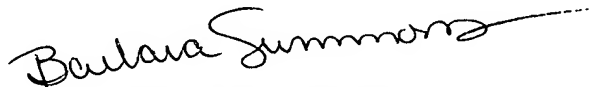
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pascal can be reached on (571) 271-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bs

September 15, 2006



BARBARA SUMMONS
PRIMARY EXAMINER